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IN THE FOOTSTEPS OF JAMES DRUMMOND WITH CHARLES AUSTIN GARDNER.

By D. H. PERRY, Victoria Park.

Dr. Serventy's obituary of C. A. Gardner in the August, 1970 issue of the *W.A. Naturalist* brought to mind many memories of my old friend. We first met in 1921 when he was employed by the Forests Department as its botanical collector. The herbarium he built up during that time was later handed over to the Western Australian Herbarium. Rather naturally he was very interested in James Drummond as a man, and as a botanist and collector, and never ceased to admire the courage and fortitude which enabled him to complete successfully his amazing collecting journeys. His ability to preserve his extensive collections in the field and to get them home despite the primitive conditions he was forced to work under was an outstanding achievement. Gardner, having made some very difficult collecting journeys himself, fully appreciated the problems of coping with the elements and with insect and fungal attacks on pressed specimens.

In the early 1940's we had many discussions on the probable routes that James Drummond had followed and by this time Gardner had been able to trace them approximately, by comparing his own collections and field notes with the plants Drummond collected. Since then, of course, Rica Erickson's researches have thrown much light on this subject and her book *The Drummonds of Hawthornden*, published in 1969, is a mine of information about the family. Gardner had set himself the task of re-collecting all the plants originally collected by Drummond, and had largely succeeded in doing this by the late 1940's. Two plants that had eluded him, I remember, were *Grevillea candolleana* and *Asterolasia phebalioides*, collected respectively, according to Drummond's notes, from the Toodyay district and the Hill River district. Gardner refers to his fruitless search for the latter plant in his article "The Botany of the Hill River District," *W.A. Naturalist*, 1 (1), 1947:1*

*In this article the word "able" in the 13th line of the central paragraph on p. 2 should read "unable." Gardner stated quite clearly in the central paragraph on p. 4 that he was unable to find *Asterolasia phebalioides*.

Gardner had made several trips to the Toodyay district to try and locate *Grevillea candolleana* but without success. In discussion I learned that he had never collected along the old track from Toodyay to New Norcia. As Drummond must have been very familiar with this track because it was the shortest route between Hawthornden and the family holdings on the Moore River and at Dandaragan, I suggested that the elusive *Grevillea* might have been collected somewhere along it. Gardner agreed and with his usual enthusiasm wanted to set out next day. However as this *Grevillea* was thought to flower in September we decided to wait a few weeks. We duly set out in September of 1947, travelling up the Geraldton highway to the old Victoria Plains hall a few miles south of New Norcia where the old track leaves the highway and runs south to Culham and thence to Toodyay. It was pretty rough going and in some places the track was not easy to follow, but our efforts were to be rewarded. I well remember Gardner's excitement when we spotted a beautiful patch of *Grevillea candolleana* in full bloom in a sandy hollow a short distance away on the east side of the track. This was the only occurrence of this lovely *Grevillea* that we located and we felt it could well have been the spot where Drummond made his collection a hundred years before. Continuing on to Culham and then to Hawthornden we placed a sprig of *Grevillea candolleana* on James Drummond's grave.

As mentioned earlier, Gardner had made several attempts during his visits to the Hill River district to re-discover *Asterolasia pheballoides* but without success. Drummond in his field notes had said that he collected this plant "along the watercourse on the east side of Mt. Lesueur" but unfortunately there are several gullies to the east and north east to choose from. Late in August of 1949, accompanied by Gardner and my son Michael, we set out to spend a fortnight collecting in the Hill River district as far north as the Arrowsmith River and then eastwards to Three Springs on the Midland Railway. We planned to make Coekleshell Gully farm our base as this was centrally situated in the region we intended to search and collect in. In all this vast region there were only two properties permanently occupied at that time and they were Frank Grigson's farm at Coekleshell Gully and the King's farm on the east side of Lake Logue. We took three days to traverse the track from Dandaragan to Coekleshell Gully. It was extremely sandy and many of the creek crossings had to be repaired before we could attempt them. However slow progress was not all due to bad tracks, we were spending much time collecting, as this region at this time of the year is a botanist's dream of heaven. The Grigsons were delighted to see us as they had very few visitors in those days. We delivered to them one wheat sack full of mail and a number of parcels as they had not been into Moora to collect it for nearly a year.

The next day, accompanied by Frank Grigson and his two young sons Noel and John, we hiked to the top of Mt. Lesueur and surveyed the country to the eastward, and speculated on which gully would contain the elusive *Asterolasia*. We decided to search each gully right down to its confluence with the main stream, as Gardner had decided that perhaps he had not followed the gullies far enough after they left the upper slopes of Mt. Lesueur. This proved to be the key to the solution and I will never forget his elation when we located quite an extensive patch of *Asterolasia* along the sides of one of the small gullies. Gardner's day was made and I do not think I ever saw him more excited. I have a vivid memory of Gardner standing in the bottom of this little gully with some *Asterolasia* in his hand describing to the three boys the floral details of the plant and telling them that this inconspicuous spot was undoubtedly the exact place where Drummond had found and collected this plant a hundred years earlier. Subsequent searching over a large area in the vicinity failed to turn up any further occurrences of *Asterolasia*.

We later followed the old stock route north to the Arrowsmith and on the way examined the Diamond of the Desert Spring, camped at Three Springs amongst the flooded gums and collected *Banksia elegans*

nearby, examined the underground river that runs westwards from Green Lake and penetrated for some distance its cavernous course. From the Arrowsmith we turned eastwards to Three Springs, on the Midland railway, and then back to Perth. Drummond was very familiar with this country as his collections demonstrate.

Gardner was a good bushman and a tremendous walker and often taxed my ability to keep up with him. I found it easier to jog along than try and keep up at a walking gait, as he could maintain a walking rate in excess of four miles per hour in the bush and keep it up for hours. We enjoyed many collecting trips together over the years and our last one was only about twelve months before he died, when we did some collecting between Perenjori and Lake Moore. He was failing then and I realised that it would probably be our last journey together. He had an indomitable spirit and although under doctor's orders not to walk more than half a mile or climb hills, I had great difficulty in restraining him. He was always at his best when out in his beloved bush, a stimulating companion with a keen sense of humour and an encyclopaedic knowledge of our flora with which his name is indelibly linked. He certainly enriched my life by arousing my interest in it.

NOTES ON THE BIOLOGY OF *VARANUS TRISTIS*

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Varanus tristis, commonly called the "Mournful" or "Raeehorse" Goanna, is a medium-sized arboreal monitor lizard (Fig. 1). Although the species is widespread, occurring virtually throughout Australia, rather little has been reported about its biology. Two races are currently recognized, a nearly pure black form, *tristis*, and a paler and more colourful inland race, *orientalis* (described by Fry, 1913). It has been thought that *V. tristis tristis* is confined to south-western W.A., while *V. t. orientalis* ranges across



Fig. 1.—An adult male *Varanus tristis* from 24 miles east of Laverton, W.A. The head, forelegs, and distal parts of the tail are nearly pitch black. The dorsum and anterior parts of the tail are a speckled mixture of grey, beige, yellow and pink. When held, the lizards maintain a very stiff posture.